SR/REPORTS TO AMERICA • No. 1

INDUSTRY *and the Liberal Arts*

IN THE last decade a significant new trend has appeared on American college and university campuses: fewer and fewer students are majoring in the fields of the liberal arts, choosing instead engineering, chemistry, and other more "practical" subjects that command higher immediate rewards in the employment market. The discussions printed on the following pages disclose how this has come about and point out the dangers the trend holds for our national culture, our industry, and the young men and women now entering adult life. This material is drawn from an exchange between representatives of industry and the liberal arts meeting at a College English Association Institute at Corning, N. Y., in October 1953. *The Saturday Review* presents it as the first of a series of REPORTS TO AMERICA, to be published from time to time as the occasion arises, dealing with matters of broad public interest that have not been adequately reported in the press.

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Reprinted from the November 21, 1953 issue of *The Saturday Review*

Introduction

LAST spring, with the approach of final examinations and Commencement Day, representatives of more than 600 large companies descended upon the campuses of the nation's colleges and universities in search of seniors who would make likely new employes. Personnel recruitment of this sort became standard business practice during the Twenties, but since the end of World War II the effort has been far better organized and conducted on a far more extensive scale.

In the last half-dozen years the recruiters have made it strikingly clear, through the notices they post on college bulletin boards and through the type of men they actually hire, that their primary concern is to find promising specialists—engineers, chemists, physicists, and the like—rather than graduates with the generalized education afforded by the liberal arts. Reports from several campuses, published in an article, "Should a Businessman Be Educated?" in the April 1953 issue of *Fortune*, document the trend. At Yale, for example, of sixty-six manufacturing companies reserving interviewing space in 1950 only eighteen indicated willingness to consider liberal-arts graduates. The following year only fifteen of ninety-one companies seemed interested in them. In 1952 only sixteen of 117 manufacturing companies gave the bachelors of arts a look. However, eleven banks, twenty-one insurance companies, and sixteen department stores did think enough of the liberal arts to give its men a hearing. This year at Johns Hopkins University the first 200 recruiters to appear on the campus indicated their preferences: 145 sought engineers, thirty-nine specialists of other kinds, while but sixteen were in the market for majors in the liberal arts. Little wonder that many colleges are reporting a sharp falling off in the number of majors in English and other departments of the liberal arts, as undergraduates scramble to take courses in "practical" subjects that will find a readier market.

This trend has alarmed friends of the liberal arts, for it is these disciplines that in the past have provided business and the professions with the majority of their leaders. Moreover, the teachers of the humanities have traditionally served as custodians of the liberal tradition in America; if their numbers decrease or their influence diminishes our national culture will inevitably be impoverished. One group that decided to do something about this danger is the College English Association, an organization of some two thousand college and university teachers of English. In the past several years the CEA, under the dynamic leadership of its executive secretary, Professor Maxwell H. Goldberg of the University of Massachusetts, has held five institutes in various parts of the country concerned with the relationship of the humanities, and especially English, to present-day society. The most recent CEA Institute, to which the Corning Glass Works played host at the Corning Glass Center, Corning, N. Y., addressed itself squarely to the problem of Industry and the Liberal Arts. For three days, October 15, 16, and 17, 125 college teachers and administrators, executives and representatives of business, exchanged ideas on the role the liberal arts are playing and should play in American education, industry, and society as a whole.

For the first in its series of REPORTS TO AMERICA *SR* is pleased to present some of the fruits of this conference. Because of limitations of space, it has been practicable to record only a few of the questions posed and the suggestions proffered. To supplement them *SR* has asked Gilbert W. Chapman, president of the Yale & Towne Manufacturing Company, to comment on the basic issues of the discussion. It is our hope that this report will encourage widespread consideration of a condition of contemporary American life that will affect our society for years to come.

For their assistance in preparing this material for the press the editors of *SR* are especially grateful to the following staff members of the CEA Institute: Dr. Goldberg, Professor Bruce Dearing of Swarthmore College, and Professor Lee Holt of American International College. In planning the Institute program, besides the three gentlemen just named, assistance beyond the normal call of duty was furnished by the following officers, past and present, of the CEA: Professor Robert T. Fitzhugh of Brooklyn College, Professor Donald J. Lloyd of Wayne University, Professor Ernest E. Leisy of Southern Methodist University, Professor William L. Werner of Pennsylvania State College, and President Gordon Keith Chalmers of Kenyon College. Thanks are due also to representatives of a score of business firms and associations who assisted in laying plans and to the staff of the Corning Glass Center, who proved themselves exemplary hosts to the gathering.

—RAYMOND WALTERS, JR.

A Liberal Education . . .

. . . is the education which gives a man a clear, conscious view of his own opinions and judgments, a truth in developing them, an eloquence in expressing them, and a force in urging them. It teaches him to see things as they are, to go right to the point, to disentangle a skein of thought, to detect what is sophistical, and to discard what is irrelevant. It prepares him to fill any post with credit, and to master any subject with facility. It shows him how to accommodate himself to others, how to throw himself into their state of mind, how to bring before them his wont, how to influence them, how to bear with them. He is at home in any society, he has common ground with every class; he knows when to speak and when to be silent; he is able to converse, he is able to listen; he can ask a question pertinently, and gain a lesson seasonably, when he has nothing to impart himself; he is ever ready, yet never in the way; he is a pleasant companion and a comrade you can depend upon; he knows when to be serious and when to trifle, and he has a sure tact which enables him to trifle with gracefulness and to be serious with effect. He has the repose of a mind which lives in itself, while it lives in the world, and which has resources for its happiness at home when it cannot go abroad. He has a gift which serves him in public, and supports him in retirement, without which good fortune is but vulgar, and with which failure and disappointment have a charm. The art which tends to make a man all this is in the object which it pursues as useful as the art of wealth or the art of health, though it is less susceptible of method, and less tangible, less certain, less complete in its results.

—JOHN HENRY CARDINAL NEWMAN.

—Monsanto.

The New Illiteracy

By WILLIAM H. WHYTE, Jr., *assistant managing editor,* Fortune *magazine.*

WE HEAR much about the reawakening interest in the humanities, the new appreciation of the generalness in the liberal arts, the growing dissatisfaction with overspecialization. Maybe so. But these signs are minute, I suggest, to those coming from the other direction. I offer the proposition that the trends that have been working against the humanities are likely to increase, not decrease, in the decade ahead.

I make the proposition because of a belief that the low estate of the humanities is intimately related with a philosophy of society that is coming to be the dominant cultural movement in the United States. The decline in English majors, the vocationalizing of college curriculums—these are no isolated phenomena; basically they are all of a piece with a great many other superficially different problems. They are the outward manifestations of a cohesive ideology, the effects of which can just as easily be traced in such disparate fields as advertising, popular magazine fiction, and life in suburbia.

Wherever it may be found and in whatever form the new illiteracy is nourished by several simple articles of faith. The essence of them is this: First, the individual exists only as a member of a group. He fulfils himself only as he works with others; of himself he is nothing. His tensions, his frustrations—these are penalties for his failure at adjustment, and they should, at all costs, be exercised. Ideally there should be no conflict between man and society, and the good world that we must strive for is one in which all are harmonious with one another and in which the measure of a man's activity is how well he contributes to that harmony. Above all else he must *get along.*

Now, is this simply a way of describing a point of view, a way of talking about uniformity? Not at all. To a degree people have always been conformists and always will be; what we are talking about is the open, articulate rationalization of conformity into something almost akin to a religion. For these tenets, these propositions are openly, indeed evangelistically, spoken, and they are being spoken more and more often. This is the heartland of the new illiteracy. In each field—be it industry, education, advertising—leading thinkers of the new illiteracy phrase the lesson with different vocabularies, all varying in the degree of fatuousness but all in the central moral united.

Let's take industry first. Its leaders all acknowledge, indeed boast, a debt to science. For if it is true that adjustment to the system is the desideratum then it follows that in proper methodology lies salvation, and a good many social scientists who ought to know better are busily at work dignifying this. They are not to be laughed away; horrendous as their jargon may be, it is a sort of uniting force which ennobles what so many people would like to hear. It is, to borrow a word, a highly interdisciplinary vocabulary.

As an example of how this relationship can work let's take a look at advertising for a moment. Advertising, as most of its more intelligent practitioners freely concede, is badly written and lacks imagination. What is the answer—more imagination, better writing?

Ah, but this is too simple. We are not dealing with the old verities, we are told. We are dealing with mass communication. Let us not, then, bother to study the lessons of the dead past. Ours is a scientific problem; it is essentially the determination of consensus. So the need is not for writers; the need is for technicians of mass communication, technologists of semantics, men skilled in action research and scientific measurement. There is, of course, one apparent drawback to polls and surveys: they are based on what is already existent. They test only what has been tried before; they cannot find out from people whether they would like something new, something untried, for people cannot answer what they do not know. But no matter. A speaker at a highly respectable conference at Columbia University explained it this way: "The belief is still general that outstanding pieces of writing are produced under a mysterious force called inspiration. The literary approach to writing, therefore, leads to a dead end. Science offers a way through all these difficulties . . . The technologist must sacrifice the possibility of superior communication in exchange for certainty that his work will meet a commercial standard."

If this advice were cynical it wouldn't be so bad. The trouble is, it isn't cynical. This is not mere counsel to lower your sights so you can make more money; it is advice on how to help society, and the moral is one a lot of people are glad to subscribe to. Nowadays if you prostitute the language, if you assault the dignity of the individual—if you strap a woman in a chair and place electrodes on her to chart her reactions to advertising (as a recent picture in *Advertising Age* demonstrated) —if you do these things you need feel no twinge of guilty conscience: you are getting the consensus. Soap operas? As a recent survey by the University of Chicago's Lloyd Warner demonstrated, these can be looked on as a service to society; illusory as their content may be, they help a large segment of our population adjust.

LET'S LOOK at another sector for a moment: the corporation. What cues are being offered? What has made for the emergence of the corporation as the dominant organization form in our society? It is due a great

deal to the imagination and vigor of its past leaders. Will its future depend on these qualities too? A great many corporation people think so. A great many others, however, do not, and a *very* large proportion of the trainees coming in agree with them.

This is not the time to examine the way the human-relations philosophy has evolved since the famous experiments of Elton Mayo back in the Twenties. But it is fair to simplify to the extent of saying that what began as a healthy response to the needs of our increasingly complex organization is fast degenerating into something else. Today, as many interpret it, human relations means that the worker—whether he is in the shop or in the carpeted office—fulfils himself by making his peace with the system. It is the constant, he the variable. The most important thing in an organization is the maintenance of its equilibrium. Where is the spark to come from? From the sheer harmony of the group. To a degree these ideas are correct. For better or worse, we are living in an age of great organization. To express one's self in an organization one must be able to get along with other people. So be it. But how much—where do you draw the line?

I think a very clear case can be made that in far too many corporations, and in far too many of the courses that prepare men for the corporation, the emphasis on getting along has become almost deafening. Conversely, more and more the inner quality is deprecated. Let me give you an example. In connection with a study *Fortune* has just completed on junior executive training, we wrote 150 corporation presidents and asked them a very tough question. We asked the same question of 150 personnel directors. We acknowledged that any organization needs all kinds of people. But we did ask them this: if they *had* to choose, which of the following would they lean towards: (1) the adaptable administrator, skilled in managerial skills and concerned primarily with human relations and the techniques of making the corporation a smooth-working team; or (2) a man with strong personal convictions who is not shy about making decisions that will upset tested procedures and his colleagues.

The vote: the presidents split roughly fifty-fifty; the personnel men, three-to-one in favor of the administrator.

What was particularly interesting, however, were the comments that accompanied a great many of the letters favoring the team player. To paraphrase, they argued that, though imagination and vigor were often desirable, they were qualities that would be best relegated to staff positions. That is to say, the real leadership of the organization would not concern itself with new ideas except as a sort of neutral judge. The people who did concern themselves with them would be kept out of harm's way, sort of captive screwballs, whose qualities would be patronized when things got a bit dull around the shop. "We used to look primarily for brilliance," one president wrote us, "but now we don't care if you're a Phi Beta Kappa or a Tau Beta Phi. We want a well-rounded person who can handle well-rounded people."

We talked to a great many junior executives, and we were dismayed to find out how very thoroughly so many of them agreed. It is the extrovert qualities that they felt were important. "I'd sacrifice brilliance to human understanding every time," one told us. The things that set a man dreaming, the big questions that provoke his curiosity, the lone, individual speculation—no longer are these needed. We have now reached an age when they have become expendable. "All the basic creative work in engineering," one trainee told us, "has already been done. The only kind of research that counts is team research, directed at immediate, practical problems."

Not so long ago I saw a very interesting documentary film put out by the Monsanto Chemical Company. It was a pretty good film, but what did it have to say about Monsanto's research—much of which has been most imaginative? In one part of the picture you see five young men in white coats conferring around a microscope. The voice on the sound track rings out boldly, "No geniuses here. Just a bunch of good Americans working together."

What's wrong with genius? We asked a number of trainees how they thought a man like Steinmetz would fit in today. "I think we could straighten out his unfortunate characteristics."

Let me recapitulate a moment. There are three points that I am trying to document.

First, that the belief is growing that the health of our society depends upon increasing adjustment by the individual to the consensus of the group. Second, that this is not simply an unwitting yen for conformity, but a philosophy—a philosophy actively advocated by a sizable proportion of the leadership in each sector of our society. Third, and most important of all, these people are not pioneers; they are not a small band of revolutionaries working against the grain of our culture. Their doctrine is now orthodoxy.

To illustrate, let's take a look at the new suburbia for a moment. In the new package suburbs growing up outside our great cities we find a life so communal that they are strikingly like the Owenite and Fournier utopias of the early 1800's. To use a word the young suburbanites utter frequently, people in the rental courts and ranch-house superblocks learn to be "outgoing." Rarely does a person have to be alone; as a matter of fact, it is practically impossible. Every moment of the day there is a civic meeting of some kind: block parties, afternoon coffees, canasta, Stanley home parties.

A great deal of this is very healthy—a way of gaining roots in an increasingly transient life, a way of finding something meaningful to do. But some of the effects are not healthy: privacy has become clandestine. To be alone, to withdraw into one's self, to express urges not synonymous with the group's—when a person does these things (and everyone has the impulse) they tend to feel a little guilty about it. If suburbia has a neurosis it is the fear of being neurotic.

Well, now, just wait a minute, you might say—isn't this simply a temporary phenomenon; isn't this yen for consensus merely an expedient dictated by the kind of housing they find themselves in now?

A good way to answer the question is to have a look at their schools. Here, if nowhere else, the young suburbanites must declare their philosophy. It is they who have set up the schools, and they have spent much time and thought on their direction.

A pretty good example is the new high school in the

—Bernard Klein.

Rich Township High School, Park Forest, Illinois.

package suburb of Park Forest, thirty-two miles south of Chicago. They are very proud of it; physically it is a spankingly modern, one-and-one-half-million-dollar plant. And they are proud of its curriculum as well as its plant.

THE curriculum is by no means unique to Park Forest High—School Superintendent Eric Baber speaks very much like many superintendents elsewhere and his writings do not show unorthodoxy so much as a deep grasp of contemporary educational literature. The trouble with U.S. education, Baber has told the parents time and again, is that it is concentrated far too much on the intellectual aspect of education. Even teachers' colleges, he observes sadly, still require plane geometry for admission. Except for a small coterie, he asks, of what value to most people are the traditional academic disciplines? "The so-called 'bright student' is often one of the dumbest or least apt when he gets away from his textbooks and memory work," Baber told a teachers' workshop. "This is evidenced by the fact that many $20,000 to $100,000-a-year jobs in business, sales, sports, radio . . . are held by persons with I.Q.'s of less than ninety."

Baber is not actually against intelligence. He believes it should be channeled toward real-life, vocational needs more than to the academic requirements of the colleges.

Of the total of seventy subjects offered only one-half are in traditional academic subjects—and the latter, furthermore, are by no means ivory tower. Of seven offerings in English available to juniors and seniors the one concentrated on grammar, rhetoric, and composition is a one-semester "refresher course . . . for students who feel the need for additional preparation." Of more appeal to teen-agers, perhaps, will be the full-year courses in journalism and in speech, for which, in the "communication laboratory," facilities are available for practical things like radio and TV debating.

The seventy formal subject offerings by no means exhaust the life-adjustment curriculum. Today, Baber believes, the schools must assume more responsibility for the *total* growth of the child. Conceivably this could be left to other agencies—to the family or the church or society itself. Nevertheless, through such media as courses in family group living (twelfth-grade elective) and "doing" sessions in actual situations the school is going to tackle it. "They must have actual experiences in solving problems that have meaning for *them*," Baber says. "Ours is an age of group action."

On the premise of the school's philosophy the parents seem to be in accord with Baber and one another; if one wishes to quarrel with that philosophy he must quarrel with the people themselves. The educators may be in the vanguard, but at Park Forest they are bucking no trends. For what is it that parents want most emphasized by the school? They were asked just such a question, and when they wrote the answer in their own words one note was sounded more often than any other. The primary job of the high school should be to teach students how to be citizens to get along with other people.

It is in this attitude, I submit, that the real problem of the humanities lies, and we would do well not to underestimate its force.

If we are to halt the new illiteracy we must understand that it appeals, because it seems to answer some very vital contemporary needs. It is an age of great organization; ours is a society in which most persons work in collective units.

Furthermore, it is important to remember that the sensitivity to the group is not a reversal of our national character so much as an extension of it. The American genius has always lain in good part in our distrust of dogma, in our flexibility, in our urge for cooperative action. As long as 100 years ago Alexis de Tocqueville (no friend of conformity) was struck by this. "The more equal social conditions become," he wrote, "the more men display this reciprocal disposition to oblige each other."

But, having noted this, can we not then—*on their own ground*—carry the offensive against the scholars of this new illiteracy? Then it will not do for them to scoff at unbelievers as people homesick for a return to a closed society in which education is restricted to a small, aristocratic elite.

The real weakness of the new illiteracy is precisely the fact that it is not suited to the times. No man is an isle unto himself, to be sure, but how John Donne would writhe if he heard who was repeating it, and why. We have reason to be proud of how well we have been able to adapt to this age of great organizations, but certainly we must not so worship these virtues as to caricature them into defects. The great problem of bureaucracy—if they are to continue vigorously—are ideas and new thoughts, and, yes, conflict. It is wretched advice that the healthy system is one in which the individual feels no conflict. Every great advance has come about, and always will, because someone was frustrated by the status quo; because somebody exercised the skepticism, the questioning, and the kind of curiosity which, to borrow a phrase, blows the lid off everything.

It is time to put the technician of the new illiteracy in his place—and that's way, way down. He is fit only to be a lackey, not a leader. He can't conjure, he can't speculate, he can't dream; I imagine he has a terrible sense of humor.

And he lacks faith. For isn't that in a way what we are talking about? What is our democracy but a testament of faith in the individual? Faith not only in our fellow laymen, but faith in our own inner resources, in man's own ability to create and to dream.

The new illiteracy would have us suppose that the whole is greater than the sum of the parts, that the system itself has a wisdom beyond the reach of ordinary mortals. But this is not so. The individual can be greater than the group and his own imagination worth a thousand graphs and studies.

I HAVE a quarrel with Bill Whyte. I don't think that this group-conformist he talks about is going to run industry, and I don't think that anybody in industry thinks so. If anybody thinks that a Clarence Randall or a Ben Fairless is something that is part of a mass I can assure you that he's very very wrong. I wish somebody would give me a formula by which I could pick fellows of that type when I visit colleges today. Actually, the complexities of business are such that someone who understands history, literature, and philosophy, who is in a position to do some disciplined thinking, has the type of mind that will ultimately succeed.

There is one placement officer of a small arts college who every so often writes us at Inland Steel and says, "We have a boy that we think you'd be interested in." We have now hired five of his boys. Every one of them is doing exceedingly well with our company. One of them, the youngest superintendent in our steel mills, an economics major, became a superintendent at the age of thirty-one.—WILLIAM G. CAPLES; *vice president, The Inland Steel Company.*

Human Problems First

By COURTNEY C. BROWN, *assistant to the chairman of the board, The Standard Oil Company (New Jersey).*

I SHOULD like to mention four reasons why I believe the liberal arts may in the future come to have a far greater attraction to business than they have in the past. The first derives from the political tensions of the day. Never before has the intellectual climate of the Western world been more important to the business community than it is today. It is gradually becoming realized that a liberal arts education, a broad education rather than a narrowly specialized education, lies at the very heart of the great Western tradition which gave rise to business as we know it today. It is the liberal arts which ultimately provide the climate in which business can best function. The characteristic end products of such an education, it seems to me, are broad comprehension, the ability to undertake appraisal in a calm, deliberate manner, an ordered capacity for reason, a sense of toleration, and a critical inquisitiveness—all of which are the basic ingredients of a free society in which enterprise can flourish.

Now at the risk of sounding a bit cynical, let me suggest that business is coming to realize increasingly that it must seek something that is more effective than simply to talk to itself about the free-enterprise system. I suspect that it is beginning to feel that it can find this thing in an educational program that has been at the very core of the development of the free society of Western civilization, namely, the liberal arts program.

A second reason why business is broadening its interests in the liberal arts, it seems to me, is that it is becoming increasingly aware that the world of the specialist is a narrow world and tends to produce narrow human beings. Not that that is infallibly the case. Men with backgrounds of specialized training and assignments in business have shown themselves capable in exceptional instances of rising above it and broadening themselves to cope successfully with large and challenging problems. But by and large the world of specialists is a narrow world, and it is difficult for the man who has lived in it to understand the overall effects of his actions and decisions, both within the business in which he works and on the relationship of that business to the outside world. As business has become bigger in its organization and in its units it has become increasingly important for top management to understand the impact of its decisions upon the society of which it is a part. I believe there is a growing realization that the type of training that is most capable of providing executives with the broad understanding and capacities necessary to run modern business is furnished by a large dose of liberal arts education applied before the executive-to-be gets deep into a specialized interest.

A third reason why business is broadening its interest in the liberal arts is that we are realizing more and more that the mechanics of running a business are really not so very complex. Most of the troubles with which management is beset arise directly from the fact that businesses are composed of human beings. The difficulty of handling machinery is nothing compared to the difficulty of handling human beings in such a way that the entire operation will be placid, smooth, and effective. In other words, the human problems of business are now reaching the point where they demand the major share of the time of top management. The liberal arts, particularly those liberal arts in the social science category, may provide today and will provide increasingly in the future effective tools that will help us understand the vast, complex problem of managing people.

A fourth and final reason why business is expanding its interest in the liberal arts, it seems to me, is that after several decades in what might be called a defensive posture business is again in a role of greater political and intellectual leadership in our national life. Now such a role requires a capacity for self-expression both in writing and orally. A man whose interests, education, and assignment are specialized is frequently ill equipped to express effectively the logical and legitimate position of business. Too frequently we find that when a successful business manager tries to articulate the position of himself and his business he falls flat on his face. There is, I believe, an increasing recognition among business leaders that the best way to equip the managers of the future with the capacity to express the business point of view clearly and intelligently is through a liberal arts education.

The Men Who Rise

By CARTER DAVIDSON, *president, Union College.*

FOR the past year and a half I have been serving as chairman of the board of directors of the Empire State Foundation of Independent Liberal Arts Colleges, an organization of twenty-two of the smaller colleges of New York intended to provide a channel by which the business corporations of the state and nation can give financial help to liberal education without the agonies of deciding that College A deserves help rather than College B. On behalf of the foundation I have enjoyed interviews with dozens of the executives of the corporations of this area, from the largest to the small.

"We do contribute funds to higher education," they say to me, "but primarily to carry on research in the technical problems connected with our product. These gifts go, naturally, to the larger universities and technical schools which have the laboratories and the research staff to do the job we want done. We also support some graduate fellowships to prepare men for positions on our own design and production staff. We send our junior executives to special workshops at the Harvard Business School or elsewhere. We made a large gift recently to a university to help them construct a building for industrial

research. And we have established a scholarship fund to assist the children of our employes to attend college. We contributed generously toward the endowment of a memorial professorship established in memory of the late chairman of our board. All these gifts we can justify to our stockholders because of their direct connection with the improvement of our product or of our employee relations. But how can we justify gifts to liberal arts colleges, especially to small ones?"

AN excellent statement, Mr. Executive, and I congratulate your company on its contributions to higher education. I don't want you to eliminate anything you are now doing. But are all your top personnel technically trained? What of your directors, your sales and advertising and personnel staff? I would wager that a high percentage of this group went to liberal arts colleges. And where do most of the graduate students in science, who later do the pioneer work in your research laboratory, receive their basic undergraduate education? In the smaller liberal arts colleges. Check on this for yourself in your own company. And how about your legal staff or the law firm you retain? Many of those lawyers prepared for law school in liberal arts colleges. Speaking of employe relationships, what is more conducive to a happy and efficient community than one with good schools, taught by graduates of liberal arts colleges? Or with good doctors and dentists and nurses prepared in basic science in liberal arts colleges?

Look for a moment at English, one of the basic subjects in the liberal arts curriculum. The teacher of English helps the student to enlarge his usable vocabulary, to cultivate his imagination to produce new ideas, to submit these ideas to the rigorous tests of logic and of value judgment, and to organize them most effectively for oral or written presentation. In the study of literature he does more than examine form or plot structure; he studies human personalities, the well-springs of their actions and reactions, their systems of values. When you think of the manifold problems which face a business executive what better preparation could he have for meeting them than such a course? No wonder so many top executives were once college majors in English! If it is salesmen or advertising men we seek the study of argumentation, of convincing by logical reasoning and of persuading by adducing all the impelling motives to action, are taught chiefly in the English classroom.

"But," the corporation officer may interrupt, "many of your liberal arts students are women; some of your colleges are for women only. We employ practically no women college graduates, and then only in secretarial posts. What possible stake have we in college education for women?"

I agree, sir, that your corporation may employ very few college women, though there are hundreds of thousands of them in corporation posts. Your firm, however, does market its product to consumers, the majority of whom are women, and your continued success may depend upon the educated perception of values among your women customers. Also, women hold or inherit half the property and wealth of America, including perhaps a large block of the stock certificates of this corporation; an intelligent, well-educated group of stockholders can be a wonderful asset for enlightened management. I should not neglect to remind you, also, that wives exercise enormous influence over their husbands, whether those husbands are corporation executives or engineers or research scientists or stockholders or merely buyers and sellers of your product—and wives who have been well educated in a liberal arts college should be able to contribute in no small measure to the corporation's success.

—*General Motors.*

". . . you find yourself involved in the geopolitics of oil and steel."

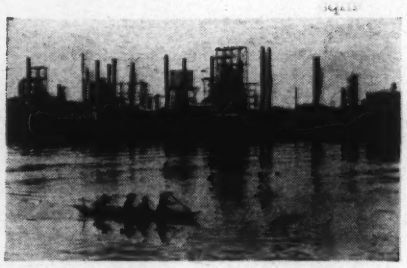
One Corporation's Problem

By JULIAN STREET, JR., *United States Steel Corporation.*

WE at United States Steel are just getting our Fairless works into full production at Morrisville, Pa., which two years ago was a farm community across the river from Trenton with a good deal of historic tradition and one policeman. Can you imagine the impact which a new basic steel plant employing some 6,000 men has brought to this community and the surrounding countryside? There's hardly a problem in the book of human and civic relations which we have not had to face. Think of the human problems involved, especially if you wish to be regarded as a good neighbor, as we most certainly do. A new hospital facility, new schools, new highways, public utilities, deeper waterways to transport foreign ores from abroad, and two complete new towns, all have had to be planned and built.

This new steel plant has also acted as a magnet in attracting some two billion dollars worth of new industrial development to the region. All this has called upon the utmost ingenuity of the scientist. But the largest problems are in the bailiwick of the social scientist. If you consider that the iron ore of this operation is to come from foreign lands, you soon find yourself involved in the geopolitics of oil and steel. In other words, Fairless Works adds up to a rather interesting laboratory for exchange between industry, the sciences, and the liberal arts.

Climbing the Managerial Ladder



By ALBERT J. NICKERSON, *vice president and director of foreign trade, The Socony-Vacuum Oil Company.*

WE recruit 100 or more college graduates each year. These are about evenly divided between technical specialists and liberal arts students. Once we have employed a college graduate, a tailor-made training program is mapped out for him. It will seldom be quite the same program as that mapped out for another graduate of the same school, same class, and same field of major study. We try to decide what work experience we want a particular man to have within a specified period of time in order to arrive at a predetermined readiness stage. By the time this training period—usually one to three years—is completed this man's supervisors have obtained a pretty clear picture of his abilities and limitations. They know for what jobs he is best fitted and have a rough idea as to how high he can ultimately go and about how fast he can get there.

For the remainder of a man's career in our company he will be constantly reevaluated in these respects, and if he continues to show ability he will continue to receive training to equip him for further advancement. Any company's products and policies, its methods and machines tend to improve only as the skills and brains and talents of its people improve. If one competitor has a material advantage today it—or a workable counterpart—is likely soon to become common property. An enterprise must rely for survival and progress on the personal qualifications of those who make up its ranks and direct its destinies. It has been said that a company with high-grade personnel and an intelligent and experienced management is almost invariably a successful company, and it is true that the development of policies that will attract good personnel and foster the growth of intelligent executives is the first and most important criterion in the formation of any enterprise.

While man's complex nature makes for few, if any, absolutes in selecting and developing personnel, management must nevertheless make sure always to utilize its investment in manpower as fully as it must utilize its investment in physical facilities and processes. Any philosophy or policy that ignores this necessity endangers the enterprise, and any policy based on the laissez-faire survival of the fittest is by any measure inadequate and therefore dangerous.

The job of management is thus in the most fundamental sense the job of developing people. A job of such magnitude demands a plan and a program flexible enough to be tailored to each individual employe, since in the final analysis it is always some one person who is being developed and trained, and each man will differ from his fellows in his specific needs and his particular capabilities.

What are the qualities we look for in the people we employ?

To begin at the college recruiting stage, once we establish the technical qualifications of an engineer or a chemist, for example, we look for about the same qualities in both the scientifically trained and the liberal arts students. Since a company hires the whole man and can never fully isolate any one aspect of him, we naturally look closely for poise, self-confidence, tact, capacity for leadership, judgment, and the ability to express himself. We interest ourselves in his work experience, his extra-curricular activities, his reasons for choosing his particular school and his fields of study—always, in fact, we like to know *why* he's done what he has.

We have a pretty solid basis for our approach. A survey of seventy-six American corporations revealed that lack of specific skills accounted for only a shade over 10 per cent of the discharges, while character traits accounted for virtually 90 per cent. Character traits also represented the factors preventing promotion in over three times as many cases as did a lack of specific skills.

Except in certain research assignments few specialists in a large company ever work alone. There is little room for virtuoso performances. Business is so complex, even in its non-technical aspects, that no one man can master all of it. To do his job he must be able to work with other people. As he progresses in the organization he must also be able to supervise people; and this is true whether in college he concentrated in chemistry or in English. In his supervisory work one of his prime functions must be the development and astute handling of the people under him, since today they must accomplish most of his work for him and tomorrow one of them must replace him. He must have a broad and solidly based sense of values. He must think effectively. He must have sound judgment.

WHILE we might have arrived at these conclusions by deduction, we have also reached them by experience. We know that when we are looking for men with executive ability to promote, their technical knowledge at that stage is often relatively less important than their ability to deal with more abstract problems involving judgment and ability to reason. There is, in fact, a sort of crossing of lines in this regard. While a man's technical knowledge may be his best tool during his first five years or so with our company, in many cases this curve tends to flatten out on the value chart and is met by the ascendant curve of the man's skill in human relations and other factors. The manager of one of our largest refineries said the other day that in his job he uses almost every skill he ever acquired except a technical knowledge of refining.

While this may be something of an overstatement, it illustrates the important point.

Every highly technological industry will, of course, continue to need highly trained and skilled scientists and technicians. But science is concerned with the measurable, and when you have summed up all the factors of a man that can be measured you still have not described or understood him. Science's dimensions seldom, if ever, attain to the level of moral values, and if we receive from the schools and colleges people whose experience is truncated by a lack in these wider dimensions we may end up with businesses staffed by men whose attitudes and concepts may be inadequate to deal successfully with the broad social and economic problems with which they are sure to be faced.

The development of men with the qualities of personality and the character traits I have discussed here is important to any company. To a large industrial enterprise with complex operations scattered over a very wide area the development of considerable numbers of such men on a carefully planned basis is absolutely essential.

CONTRARY to the notion that many people have, business does not become more centralized as it becomes larger and more complex, nor do its many employes become subservient to a comparatively small number of powerful men. Exactly the opposite situation prevails. As our industrial society becomes more mature and more productive it tends to decentralize steadily and to require increasing numbers of educated and able men.

The oil business illustrates this tendency. When it was small, making very few products and those in small quantities, it could operate with a handful of people at the top, a disproportionately large number of people performing simple jobs at the bottom, and not many men in between. A company could have one sales manual, one operating manual, and so on.

But as the number of products rose from a few to several thousand, as the volume of business rose from thousands to hundreds of millions of dollars, as the number of employes rose from hundreds to tens of thousands, what else did we see? We saw the numbers of people doing simple tasks diminishing proportionately and the numbers of men in intermediate management increasing proportionately and absolutely. The whole operation became so large and so complex that operations had to be decentralized. This called for men able to assume progressively greater responsibilities, to exercise greater individual autonomy, to develop to higher levels. The opportunities for individual development tended, in fact, to increase more nearly geometrically than arithmetically.

A large corporation must have an organization structure that permits great decentralization of authority and responsibility, for the reason that if it does not decentralize it will tend to *over*centralize. Its field management will be restricted in the exercise of its judgment; top management, insulated from field problems by several levels of supervision, will fail fully to understand those problems; and the whole organization is likely to resist change and to become inflexible.

In order to avoid this situation an oil company, such as the one I work for, is likely to break down its operations into the following broad functional classifications: Producing, Refining, Marketing, and Transportation. These functional classifications will be subdivided into geographical classifications. Our objective is to decentralize both authority and responsibility to the lowest operating geographical subdivision so that the executive in charge of a producing district, a refinery, a marketing district, or a pipe line division is as nearly as possible placed in the position of the owner of a small business. He has all his operating facts and statistics at his finger tips, and is subject to the control of his superiors only on matters of considerable importance such as operating policies, budgets, and high-level personnel changes.

Top management in order to create these conditions must develop administrative techniques that permit it to discharge its overall responsibility for results while at the same time decentralizing authority and responsibility to the utmost. In our experience the best method of encouraging decentralization is to prepare carefully worked-out profit-and-loss statements in each geographical subdivision which reflect the operating results within it. These statements, though subject to limitations, particularly in a business such as ours where many products are manufactured from a single raw material in a continuous process, can provide a measurement of profit or loss in the operation of a department or a geographic unit in a department.

There is much that progressive companies can do to train and develop their new employes. Training is primarily the job of business, and education the job of the schools. That is an oversimplification, of course, but it is abundantly clear that business must look to the schools for the basic development of the men it needs. A comparatively recent and widely read survey of the field of American education contains the following statement: "We need people with convictions reasonably and deeply held, the sane judgments which come from emotional stability, and the imaginative comprehension which comes from understanding the whole condition of man."

Our business system, indeed our whole scheme of contemporary American life, requires the education of young men and women of moral stamina who can think and who can discriminate among values. This implies the necessity for the continued extension of a sound liberal education to every American boy and girl with the capacity to assimilate it.

—Standard Oil Company (*New Jersey*).

Arab tribesmen water their camels by a new silhouette.

Industry Should Train More

EVERY year more and more businessmen talk about the importance of liberal arts education. Yet when the managers of their employment offices go around to colleges they take up about one liberal arts graduate for a hundred engineers or graduates of some other specialized training.

There's one way we can look at this that business can certainly understand. Any quality product is a costly thing to produce. The social cost to provide the nation with broadly gauged business managers is a great cost. The basic question is how shall this social cost be allocated? To what extent should business take on that cost? Today the colleges are doing it for the community-at-large. The truth of the matter is that we need both broadly educated people and specialized education, preferably incorporated in the same B.A. degree. But business may be better equipped to do the job of specialized education than almost anybody else. They know what they want. They haven't done too much of it, however, probably because so much of it is done for them outside of the business firm.

Thus one way in which business might recognize its obligation to liberal arts education is by taking on more of the load of specialized training after people come into service, thus allowing the educational world to move somewhat more in the direction of liberal arts education. If that were done, and a better balance in the curriculum achieved between specialized and general subjects, we might avoid the contradiction of saying we need liberally educated people because of the needs of the nation, the needs of business, and the needs of the people themselves, but at the same time placing every inducement before college students to undertake specialized programs.

—COURTNEY C. BROWN.

IMPROVING LIBERAL ARTS TEACHING

Break Down the Departmental Walls

—United Press.

By ELMER E. SCHATTSCHNEIDER, *professor of government, Wesleyan University.*

TEACHERS of English and teachers of social sciences have one thing in common: both teach subjects of universal importance and both have obligations to the whole academic community. By definition they also share a common membership in the mystical union known as the liberal arts. A liberal education is to be found wherever there exists an explosive mixture of ideas drawn from a variety of disciplines. Unfortunately, we have sometimes underestimated the capacity of college professors to avoid intellectual contact with their colleagues even under the stress of close physical propinquity, like the chemicals on the shelves of the laboratory which remain inert as long as each is sealed in its own container. The plot of the great academic comedy of our time is built around the fact that each of us is likely sooner or later to begin to think that he is a broad gauge and liberal sort of fellow who is unfortunately completely surrounded by nasty specialists.

How does it happen that we have broken so few bottles and have produced so few explosions? The chasm between the social sciences and the humanities is now so deep that we are in some danger of being unable to understand and influence each other. The injury done to the social sciences by this estrangement is very great, for the social sciences need very badly, never more than now, a more profound insight into the nature of man without which the social studies are in some danger of becoming a mere mass of superficial statistical uniformities.

As a veteran of the academic wars, I would like to suggest that neither the social scientists nor the humanists are likely to win the affection of their colleagues by starting a big propaganda campaign concerning the virtues of their special studies. For this reason, I should like to propose a new strategy for breaking down the dangerous tendency of the liberal arts to divide into a number of armed camps. We have *talked* about integration for a solid generation, but interdepartmental friction remains a notable fact on our campuses and the intellectual results of our reforms have been less than revolutionary.

Why have we made so little progress in intellectual collaboration? Collaboration cannot be imposed from above by the administration, it cannot be legislated by the faculty, and it is not primarily a question of curriculum. The deadlock of the specialists cannot usually be broken by departmental aggression or aggrandizement.

We have been less successful than we might have been because we have tended to forget that intellectual cooperation is, first of all, a *human* problem. Back of the isolation of the specialists lie questions of prestige, recognition, income, and security. The intolerance of the specialists covers a sense of insecurity, because the worst form of unemployment imaginable is the unemployment of the intellectual specialists.

There is no struggle in the world more bitter than

that of academic people who feel that their whole careers depend on their ability to maintain the prestige and the separate identity of their specialties in the curriculum. We have not been very intelligent to have failed to understand the psychological and human implications of a reorganization of the liberal arts college.

Intellectual collaboration is best started at the bottom, on the initiative of individual scholars, under circumstances that are likely to contribute to the security and happiness of everyone concerned. It is astonishing to see how many proposals for the integration of the liberal arts contemplate the use of authority to reallocate students, resources, and the time and energy of the faculty. This approach is nearly always resisted.

Schemes for academic reform are likely to be much too grandiose because the intellectual cooperation of specialists is a personal process that must be carried on more or less privately at the beginning by people who are intellectually congenial. We need to experiment on a personal basis on our own initiative with modest projects.

COLLABORATION needs to be worked out at the faculty level in terms that enable each of the collaborators to discover that the process increases his usefulness, security, and prestige. We cannot afford to work up contests in which the losers resign from the profession. Instead, we need to learn by experience that we can work together under circumstances in which two plus two is likely to be a million. (For what is a good idea worth?)

I should like to describe one explosive mixture that has been produced in my college, Wesleyan in Connecticut, and to tell a little about what it feels like to live in an explosion.

The Public Affairs Center at Wesleyan is a *place*, a *program*, and a *focus of interests*. It grew out of our dissatisfaction with the kind of work we were doing. The hero of the story is the group. If I said that the Public Affairs Center is a project carried on by history, economics, and government departments I would not tell you the story at all because I would leave out of it the personal experiences we have had. The story begins several years ago when someone offered the government department a building of its own. We decided that a departmental building would merely accentuate our isolation. So we made a counter-proposal. We asked for a building to house all of the social science departments under one roof. That was the luckiest decision we ever made because the donor responded by asking us to develop a program to put into the building. After that the three departments had something to do together. As soon as we began to work together things began to happen to us and they have been happening ever since.

As I think about it now I think that we were lucky because the college administration was not greatly interested in the project. It was our own idea. We were lucky because there was no attempt to force anybody to do anything he did not want to do. We did not attempt to break down departmental autonomy. We did not set up a big interdepartmental course, not because we were wise but because our personal relations were not very good. We have never had a chairman or a director and have never voted on anything and have never brought up a proposal for a general faculty vote. As a group we simply wanted a building.

In that kind of atmosphere we were able to agree freely about some important things. First, we all agreed that we were all doing the same thing—that the social sciences constituted a seamless web and that the political scientists, for example, would be better political scientists if they knew more about economics and history and that we ought to try to find more opportunities for picking each other's brains. We wrote a report together. We talked often and long about what we would like to do if we could get the money to finance our projects. We planned cooperative courses. We learned to support each other: when we introduced the workshops in the introductory courses all of the three departments concerned moved together so that we did not drive the students out of one department into the others. In short, we became a group, and it is literally true that the mixture of ideas had an explosive and exciting quality from the beginning.

We began to like each other better; the morale of the whole group improved; we felt a new kind of happiness in our association. Everybody began to be glad that he belonged to the group. We all felt more secure. Other departments on the campus began to want to join our group. Our relations with the president of the college, with the trustees, and the rest of the faculty improved. In my whole life I have never had an experience like this.

Nobody foresaw how far our informal and formless project was going to go but nobody has put any brakes on it.

We have had a revolution in the teaching of the social sciences resulting from a succession of experiments such as:

1. The workshops.
2. Interdepartmental seminars (only two so far).
3. Cooperative programs (such as the community studies).
4. Summer program.
5. A *faculty* seminar in ethics and the social sciences.
6. An institute on ethics and politics.

Other projects are planned. In fact, we are in danger of being swamped by the multiplicity of the schemes that seem to erupt all over the place.

What the program calls for is less talking at students, less lecturing, less passive learning, less learning of predigested factual materials, and less talking about books. It involves more working with students, more student responsibility for his own education, more attempts to put the student in learning situations, more use of books, more assistance to students in finding data and using materials, much more criticism of the essays and reports written by students, more revision of written reports, and a general breakdown of the idea that any of the social sciences or the social sciences as a whole can stand on their own legs.

What is more important in the long run is the fact that the members of the faculty are experiencing the excitement that comes from a reconsideration of their own ideas from new points of view. In my department we feel that we are working on a kind of transvaluation of the whole content of political science and we tell each other that we shall some day establish a new species of political scientists. For myself, I wish that this sort of thing had happened to me twenty-five years ago.

—*Corning Glass Works.*

Blowing glass for the largest light bulb.

Accent the Ideas

By ALVIN C. EURICH, *vice president, The Fund for the Advancement of Education.*

As a suggestion for revitalizing liberal education, I should like to propose that we focus less attention on the organization of knowledge in forming the curriculum, and that instead we concentrate more upon the end products expected in a liberally educated person. With this approach the functions of a liberal education might become clearer.

As generally acknowledged, we teach the student, on the one hand, facts, events, literature; and, on the other, skills as in speaking, writing, calculating with figures, and conducting laboratory experiments. Yet all of our psychological studies in the area of learning and retention show conclusively that facts learned or specific knowledge acquired is not retained for long.

In defense of the present college education we argue that the facts and events may have been forgotten, but there is a residue. And what is the residue? Again we argue that the residue consists of having learned a way of dealing with facts—a way of thinking about them, a method of organizing them. Even though we do not remember the facts, we certainly must have acquired an understanding of the great ideas.

This type of reasoning leads to an important and obvious question that is seldom raised. Could not a liberal arts education become much more effective if it dealt directly with the great ideas rather than with fragmentary subject matter in the hope that the ideas might be retained? Suppose for example, instead of organizing the common core of a college curriculum around special subjects such as history, political science, sociology, economics, literature, basic sciences, it were organized around some of the really important ideas that have had a major impact upon the development of civilization with subject matter from these various fields drawn upon so that the student might acquire a direct understanding of the ideas—would not a liberal education then have more meaning?

The matter of identifying the basic important ideas is of itself a most difficult task to be sure. We could not expect to find agreement on all ideas that are basic, but certainly there can be agreement on the need for common acquaintance with ideas seriously claimed to be basic—ideas which have contributed in varying degree to the formation of our culture, ideas which any thinking person will encounter and struggle with at some time in his life.

On some of these ideas we would readily agree. For example, we could, I am sure, agree at once that every student in the process of acquiring a liberal education should gain an understanding of such fundamental ideas as freedom or liberty, justice, evolution, democracy, relativity, truth, induction, dignity and worth of the individual. The list could easily be extended. These ideas cut across many fields of subject matter if a full understanding is to be gained.

This approach requires a reorientation and a reorganzation of knowledge. It would be a challenge to our best minds. We have reached the point when the range of knowledge and understanding is to extensive, it is no longer possible to deal with all of it. The reorganization is essential if the scope of a liberal education is to be comprehensible and if the impact is to be definite and retainable.

Furthermore, in addition to centering a program of liberal education on ideas, we need to make a new approach to the development of the ideas so that we can deal with them at different levels of maturity. We have done this in the past with organized subject matter. We teach some American history at the elementary school level, we teach it again in high school and again in college. Only in the upper levels do we get into the really controversial matters, because we assume a degree of maturity is important in a concern with controversy.

In discussing ideas within the subject matter framework as we do at present, we tend repeatedly to reiterate the elementary concepts without fully developing the complexity of the idea. For example, without having made an analysis of the levels at which we now deal with the idea of freedom, I would judge that we cover the elementary phases over and over again without really hitting the controversial levels except, perhaps, in courses on political science where we are concerned with freedom in the state and government without being concerned with its meaning and importance in the sciences, in literature, in the arts, and in our economic life. Freedom of enterprise has been as important to the development of our industrial leadership as free enterprise in ideas has been to our intellectual life.

If the common core of our programs of general or liberal education were centered upon the major ideas important in a developing civilization and with full recognition of degrees of maturity in thinking about these ideas, our programs would become more meaningful.

Obviously the ideas would not encompass all of liberal education. There would still be the need to teach communication skills and languages, mathematics and laboratory work. These are the skills necessary to extend a liberal education beyond the limits acquired in college.

THE humanities can most effectively contribute to the making of management leaders by *being themselves*, by finding out and concentrating on their peculiar and important function in education.

I suggest that that function involves their peculiar way of meeting, dealing with, and controling human experience in such a way as to lead to progressively higher organization of the physical organism, the mind, the emotions, and finally to the fusion of all these things.

As an addendum, but not an afterthought, let me point out one fact. The large companies can indulge in the luxury of hiring A.B.'s without specialized training because they can get their money back eventually. The smaller company must have a man who can pull his weight on the first day.

On a curriculum basis, then, the liberal arts college should encourage its men to acquire some basic skills, too—just enough to get them launched on the day they go to work. Have them do it during the summer, or during the school year without academic credit. It won't kill them, and it is not incompatible with the study of the really important things I have just mentioned. Businessmen will be readier to look at the A.B. if his qualifications include some small skill that will make him an asset while they are training him further.—FREDERIC E. PAMP, JR., *division manager, American Management Association.*

Goals for the Humanities

By HOWARD LEE NOSTRAND, *chairman, department of Romance languages and literature, University of Washington.*

THE humanities can best help to educate the managerial leader, it seems to me, if the college teachers concentrate on half a dozen practical objectives, namely:

PRECISE USE AND UNDERSTANDING OF LANGUAGE. This objective includes not only skill in verbal self-expression and the ability to read a text closely, but also an understanding of the nature of linguistic symbols and the effects they have on the thought process of linguistic communities. This objective appears to have been achieved the best, though not the most quickly, by those who have carried the study of language beyond their own tongue to at least one other.

A HEALTHY RESPECT FOR LESSONS OF THE PAST. Only through experience of some historical studies or other, it seems, can we acquire the habit of taking into account the historical dimension of our decisions in professional and personal life, so as to avoid the two oversimplified views, the one that our basic problems have never been noticed before us, and the other that "history tells us" the right answer.

A WIDENED RANGE OF SOURCES FOR CREATIVE IMAGINATION. The resourceful mind continually solves problems by redefining them, adding something new that the narrowly specialized mind had supposed was walled off in a different category of ideas. The arts teem with suggestiveness: their history is a record of just this sort of achievement. Furthermore, the ability to enjoy any of the arts is the key to the good company of stimulating, creative contemporaries with whom an over-specialized businessman or professional man simply has nothing he can discuss.

VICARIOUS EXPERIENCES OF LIFE AND PEOPLE. Literature enables even a very young man or woman to be ready for a variety of strange situations and strange individuals such as one cannot hope to have met oneself, nor to understand by oneself with anything like the penetration that great authors can teach the thoughtful reader.

A MATURE GRASP OF THE NATURE VALUE OF JUDGMENTS. The adolescent mind, understandably, yearns for definite answers to the great issues underlying life's practical decisions. Years later the same mind, as it approaches senility, will seek the same deceptive security. Against this tendency to self-delusion, it is the function of the humanistic studies to speed and to prolong the state of maturity in which one can face the fact that inevitable conflicts, among moral and social directives, require a constant effort to keep an ever unstable balance of life purposes. The sciences and technology aspire to the definitive solving of problems; in the humanities the state of most enlightened understanding is often a state of unresolved suspension between opposite poles which all constitute bad extremes.

A SOURCE OF MORAL SUPPORT FOR UNSELFISH ASPIRATION. The cultivation of all the sciences, arts, and technology is essentially instrumental to some basic purposes in life that we may as well recognize as one's religion, whatever may be one's theology or lack of it. Religion, philosophy, and the symbolism of the arts are the means we have of visualizing and sharing the sense of purpose that gives the instrumental activities their reason for being. If our civilization has any great weakness, and I believe it has, the weakness lies in the clarity and moral force with which individuals conceive their most basic life purposes, and in the sense of common purpose to which, I believe, our highest individual aspirations logically lead, not only within a national or a linguistic group of humanity, but in a global community of all mankind.

If it is true that these very diverse contributions are needed in the education of leaders in management, and if, likewise, humanistic studies are the chief vehicle for reaching these half-dozen objectives, then have we not underestimated the proportion of college life that such studies need to occupy in the preparation of the future industrial executive?

The Art of Making Men

THE question of utility has been raised during this institute in a way that I must resist. It would be a mistake to ask: "How can we make the man trained in the liberal arts useful to management?" Utility is not the problem of the liberal arts. Only when they are seen to exist for their own sake can they contribute to the formation of a well-rounded person. We cannot train students for business, and business would be in a bad way indeed were it to depend on us to do so. Nor in any final sense can we "make men" of our students. We can, however, labor to convey the liberal arts *as if* we were able to "make men." From time to time I am even encouraged to hope that teaching in this way does in fact contribute to whatever it is we mean when we speak of "making men."

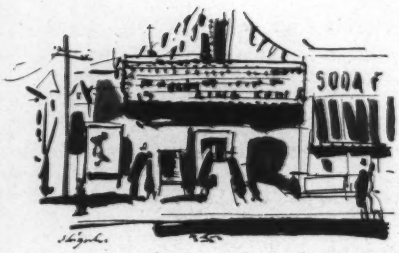
In any case, there can be no question of utility. The best product we can hope for—and a high product it is when achieved—is the man of general culture. This is what we have to offer at our best. If we can turn out such men, management will then have a responsible and responsive personality to work with. This is what we have to offer. And this we can achieve only when we seek the liberal arts for their own sake.

—JOHN CIARDI, *professor of English, Rutgers University.*

—*Acme.*

Recessional after the granting of honorary degrees, Yale.

DRAMA AND THE INDUSTRIAL MANAGER



By FRANCIS FERGUSSON, *professor of English, Rutgers University.*

THAT new figure in the contemporary scene, the "statesman of industry," is a relatively little-known man. He is not yet part of our folklore, like the almost legendary robber baron of the past. His profession and his role in the modern world are almost as mysterious to the public at large as that of the physicist: we know that what the physicists are doing will have radical effects upon our lives and our children's lives, but we lack the technical training, the special knowledge and the "contacts" to follow their operations directly. We depend upon second- or third-hand information—popularized summaries, propaganda, and the like. The same is true of the managerial leader.

But, fortunately, we do have a very interesting literature which has been growing rapidly in the last few years, which seeks to describe the modern industrial leader, his power, his responsibility, and his social role. In one recent book of this kind, "The New Society," Peter Drucker compares the structure and the functioning of a modern industrial enterprise to a symphony or to a finely-integrated performance of a play. "But," he says, "in the social pattern of mass-production the difference between operation and operation, between job and job is so profound, the specialization carried so far, that the worker can have no immediate understanding, usually not even a superficial knowledge, of the next job. . . . The whole and the relationship of the individual to it are visible only to the people at the top—to the conductor, to use the analogy of the symphony orchestra. They see the pattern, understand the order, experience the vision. But the great mass below do not unaided see anything but chaos. . . . And the farther they are from the top the less able they are to see sense, order, and purpose."

If Mr. Drucker is right the industrial leader, the "man at the top," has a terrible responsibility as the only one who can see sense, order, and purpose in the actual texture of life in an industrial society. That is the very responsibility which the new leaders are recognizing—and we pin our hopes to this new attitude on their part.

But I wish to develop another side of Mr. Drucker's idea—namely, that there is an analogy between the arts of the industrial manager on the one hand and the arts of the musician, the dramatist, the orchestra-conductor, and the director of a play on the other. The man who devises and runs a modern industrial enterprise is trying to form very diverse elements—machines, processes, men (of all degrees of skill and intelligence)—into a functioning, changing, growing organic pattern. The man who devises a symphony or a large play—or even the man who directs its performance—is trying also to fit very diverse elements—ideas, characters, live actors, and live audience, visual and sound and light effects—into a functioning whole, the performance, which has its changing life in the "two-hours' traffic of the stage." I believe that any healthy relationship between the managerial leader and those who work in various ways at the art of drama would be based upon a mutual understanding of this analogy between the two arts—superficially so different, yet at the same time (if Mr. Drucker is right) so akin in what might be called their principles of form or composition.

Before the Industrial Revolution the leaders of society were the natural connoisseurs and patrons of the drama. And at a few great moments of history—when both the drama and the arts of rule were at their best—this relationship proved very fertile. Take for example the familiar instance of Shakespeare's age in England: a creative time, when the English were building their political forms and their political and social wisdom, or know-how, and also their literature, especially drama. At this distance we can see that the British sense of form—that wonderful combination of authority with freedom, democracy with monarchy, tradition with flexibility—governs both their political arts and their dramatic art of Shakespeare. Shall we say that Shakespeare learned his principles of composition from a study of the monarchy, or that the statesmen and rulers learned their art from the wisdom embodied in the arts of letters and the drama? Both, for I think the influences were reciprocal. And that is why a study of Shakespeare's plays throws such light on the British social genius. It is no accident that both Elizabeth I and James I were theatre fans—they must have sensed the analogy of their arts of rule to Shakespeare's. They must have felt that he offered to them as rulers recreation in the old sense of re-creation.

I MENTION this instance of Shakespeare and the leaders of his society only to illustrate the ideal relationship, one based on understanding, respect, and a sense of common humane values. But it is all too evident that our situation is very different from that of Shakespeare's age. His society was of a manageable, human size; it was comparatively homogeneous, old, and stable—for the changes going on then were far less rapid and fundamental than those we witness. It was much easier for artists and statesmen, soldiers, merchants, and ecclesiastics to know and understand their own and each other's arts, and their various roles in the life of society as a whole. It is obvious that the managerial leader does not occupy the same crucial and symbolic place in our society that the Renaissance monarch did in his: and it is painfully evident that Broadway does not mirror and illuminate the drama of our times as "Hamlet" or "Macbeth" did in their day.

In our country the relationship between the drama

and the leaders of society has hitherto been that of show business to the "tired businessman." The businessman is tired out by the serious business of making money all day, but in the evening he kills a little time with the unserious business of the theatre. The show business endeavors to meet his requirements—with legs, tunes, and routine jokes. And when the tired businessman goes to such a show with out-of-town visitors (the sales manager of the Cleveland branch) he is reasonably happy. Sometimes, however, his wife—who is fresher than he is (after a morning in the beauty parlor and an afternoon of bridge) will haul him to a highbrow play; but when that happens to him he slumbers or groans. Ibsen, Chekhov, Pirandello—even their heirs, Tennessee Williams and Arthur Miller—are not for him.

I have deliberately simplified this picture for the sake of clarity. I trust that the tired businessman is as out of date as a dinosaur or a robber baron. He is a caricature, a modest part of our folklore. But he is very understandable in his reactions—very right to want to be entertained: the theatre must of course do that first, whatever else it may do at its best. He may even be right, in a way, in mistrusting the modern drama. But I do not attempt here to go into such questions as these. My point is simply that the tired businessman and show business make, between them, a pretty trivial and meaningless team, and that if their relationship were the whole story there would be no point in trying to talk about the theatre at all.

There is the great tradition of serious modern drama, including Ibsen, Chekhov, Strindberg, Lorca, and many others. And we must remember that this drama was made possible by leaders of society with the vision to support the great Continental repertory theatres, the Comédie Française, the state theatres of Germany and the Scandinavian countries. We tried to emulate such theatres here in America in the Twenties, when the so-called "art" or "little" theatres briefly flourished. I think we owe most of what is best in our theatre—directly or indirectly—to this movement. But our art theatres did not really take root. They did not survive the period of the Big Money and its crash in 1929. And nothing has appeared to take their place from that day to this. Why is that?

I think the most fundamental reason is that neither the men who work at or study the theatre nor the leaders of our society have had the understanding or vision which the theatre requires if it is to do its best job. The understanding I mean is an understanding of our modern world itself. We do not seem to know what is really going on in our time, what the crucial forces in society and our individual lives are. In short, we do not see what the real drama of the modern world is. No wonder no one knows how to put it on the stage.

The great drama of the nineteenth century—Ibsen and Chekhov, say—had its vision of human life and society under the bewildering impact of industrialization. This vision still has great authority. In general it shows man as the victim of the new forces, and the bewildering changes, which applied science released. Neither the new forms of society nor the decaying traditional forms make any sense to the heroes of Ibsen and Chekhov. They are often men of great intelligence and cultivation; but Mr. Drucker's description of the great mass of the population in our society applies to them: they do not see sense, order, or purpose in the new industrialized age. The vision is gloomy, but it is very cogent, and the drama which embodies it should be required reading for managerial leaders.

Nevertheless, I believe that this tradition of drama has now done its work, and that there is little to add to it, little further development possible. That is why some of our playwrights of talent or even genius—Odets, Miller, Williams—seem to me of limited interest. I think they are adding footnotes to Chekhov or Ibsen, rather than beginning something new and different. Nineteenth-century drama has had its say; the robber barons have done their work, and some new phase is upon us. We

"Murder in the Cathedral"—"we do not seem to know what is really going on in our time."

do not know what it is, but we can see that the power of applied science is still with us, still expanding, still mysterious, and still out of control. It pours out a flood of refrigerators and guided missiles together. Nobody owns it: Hitler had it yesterday, the Russians have it today, tomorrow the Chinese and the Africans will have it also. It is power, in itself neither good nor bad, but potentially both. As power Lord Acton's often-quoted remark applies to it: one of its properties is that it can so easily seduce or corrupt those who have it. It is the least understood but perhaps the most important of all the characters in the half-hidden drama of our time.

I am supposed to be telling you what the managerial leader could do for the arts of the theatre, and what they could do for him. I do not think it is that of the economic support of the theatre, or that of the cultivated pleasure of the managerial leader. In our present situation such matters are of secondary importance. They are lost in the larger problem: how we are to make sense of our changing society in general. That, of course, no individual and no social group, no class or profession can solve alone. But the manager and the dramatist can help each other.

The managerial leader might increase his understanding both of his own art or profession, and of his role in society as a whole, by studying the drama. The drama of Shakespeare or Sophocles is drama at its best; it reflects and criticizes society at healthy and creative moments. The drama of the nineteenth century reflects the impact of applied science upon the traditional order. I feel sure that the more the managerial leader understood such drama the better he would grasp his art, and also the scope of his opportunities and responsibilities.

But at the moment he can do more for the drama than the drama can for him. He can get ahead with his present efforts to make sense out of our industrial society itself. He occupies the strategic spot, both for grasping and for dealing with the new power. If we are ever to understand the real drama of the modern world, not as a "pathos"—the suffering of unknown forces—but as a struggle for humane and intelligible ends, the leaders of our society will have to outline the plot.

The Opportunity Ahead

By GILBERT W. CHAPMAN, *president, Yale & Towne Manufacturing Company.*

THERE is a growing fear in the United States that we are facing as great a danger from internal ignorance as from external attack. Our advanced technology has fostered the rapid growth of specialization, and, with it, the intellectually incomplete man.

The very nature of technology produces a relentless pressure for scientific training. American industry seems insatiable in its requirements for specialists. Its demand for them is greater than the supply. Our colleges respond by narrowing the fields of learning. In such an atmosphere, these institutions can hardly be blamed for emphasizing in their curricula those courses which will aid students in seeking their future livelihood.

The United States has become a dominant power in the world, but she cannot for long exercise her power or fulfill her mission without our being a people literate, educated, and cultivated. Whether or not specialization will incapacitate her for world leadership is no longer a debatable question. Responsible educators and industrialists now agree that fragmentized education is not sufficient preparation for a full life or sound leadership.

The vast importance of this problem was clearly demonstrated in the 1953 College English Association Institute at the Corning Glass Center when a large group of educators, industrialists, and editors grappled for three days with the dilemma of the under-educated American in his world of growing responsibilities.

The discussions accomplished progress on two major fronts. They defined the problem in precise terms, and they clearly showed that the solution is a matter for the attention of both the educator and the industrialist. The recognition of this joint responsibility should result in a reappraisal of the specific demands of industry and the undertaking of a broader cultural curriculum by the educators, without jeopardizing the supply of able young men.

While the investigation at Corning thoroughly aired a vital, national problem, it was too often pessimistic. It is true that specialization has caused a widespread dependence on group performance, but the effacement of genius and the individual has not been as general as some of those at the Institute believe. Creative genius clearly demonstrates itself early in its schooling and naturally is led in the direction of specialized training. Undoubtedly many technical students are unfamiliar with the study of the humanities but there is no reason to believe that, if they were exposed to such courses, they would not greet them with enthusiasm. Attendance at symphony concerts, music festivals, art museums and adult educational classes is rising rapidly. There is a surge towards culture throughout the country. The desire on the part of the student is there.

In the long run, it may be that no revolutionary changes will be required either in our educational institutions or in the shape of our industry. There is need for a movement away from extremes to a middle-ground of less specialized technicians and more educated specialists. In this movement, the university's staunchest ally will be industry's top managerial group.

Industry will have to redefine job qualifications for specialists so that a fundamental grounding in the applied sciences will be acceptable, as against the present tendency to require complete schooling in them. Further technical knowledge can be acquired during the early years of employment either by actual experience or in courses promoted by the companies themselves. Such a program will release more time for the study of the liberal arts by professional students while in the universities.

American business has largely supplanted the individual private donor as a major source of university funds. Last year, approximately $60,000,000 was given to colleges by corporations. A substantial portion of this sum was earmarked for special purposes and for research in applied sciences. It would be a great aid to education if increasing amounts were marked by industry for the liberal arts or if grants were made unconditionally.

Great crises of history are caused by economic pressures, originating in the desire of man, good or evil, to better his standard of living. These crises can only be conquered by moral force. Never before in history has mankind developed the power to destroy itself. The need for stamina and strength to control this threat can only be met by the enlightened moral and spiritual education of our youth. The specialist must also be a humanist.

Distributed as a Supplement to *The CEA Critic*, Vol. XVI, No. 1,
January, 1954, through the courtesy of *The Saturday Review*